

# Lumi Project Budget and Schedule

Alex and Sergio



# Resource Loaded Schedule

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- See attached document

# Major Milestones

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- Dec 11, 2008
  - Ship Rack Electronics
- Jan 31, 2009
  - Ship Preamps
  - Complete Detector Installation
- Apr 23, 2009
  - Complete Shaper production
- Sep 2, 2009
  - DAQ Phase II complete

# Cost Estimate

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- LBL actual FY09 rates directly related to the staff assigned to the tasks
- Used off-site rates for those with extended travel
- All cost include corresponding overhead
  - Travel, materials, and shipping
  - Labor

# Contingency Analysis

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- Itemized by task
- More risk associated with unknown items
  - those depending upon the LHC schedule
  - Higher technical risk
- Overall contingency of ~24%

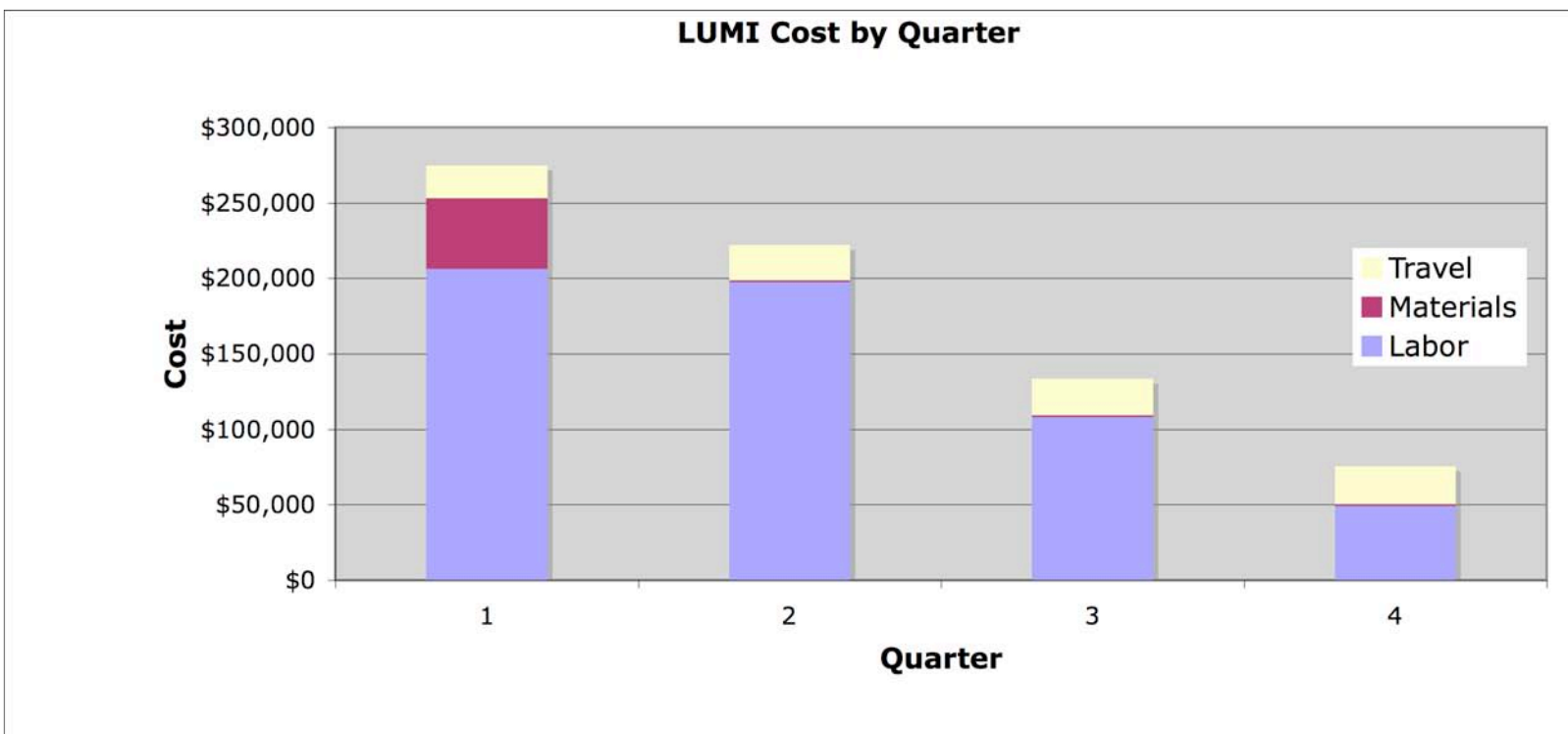
# Effort Summary

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- Total 4400 hours
- About 2.4 FTE
- Not including beam commissioning

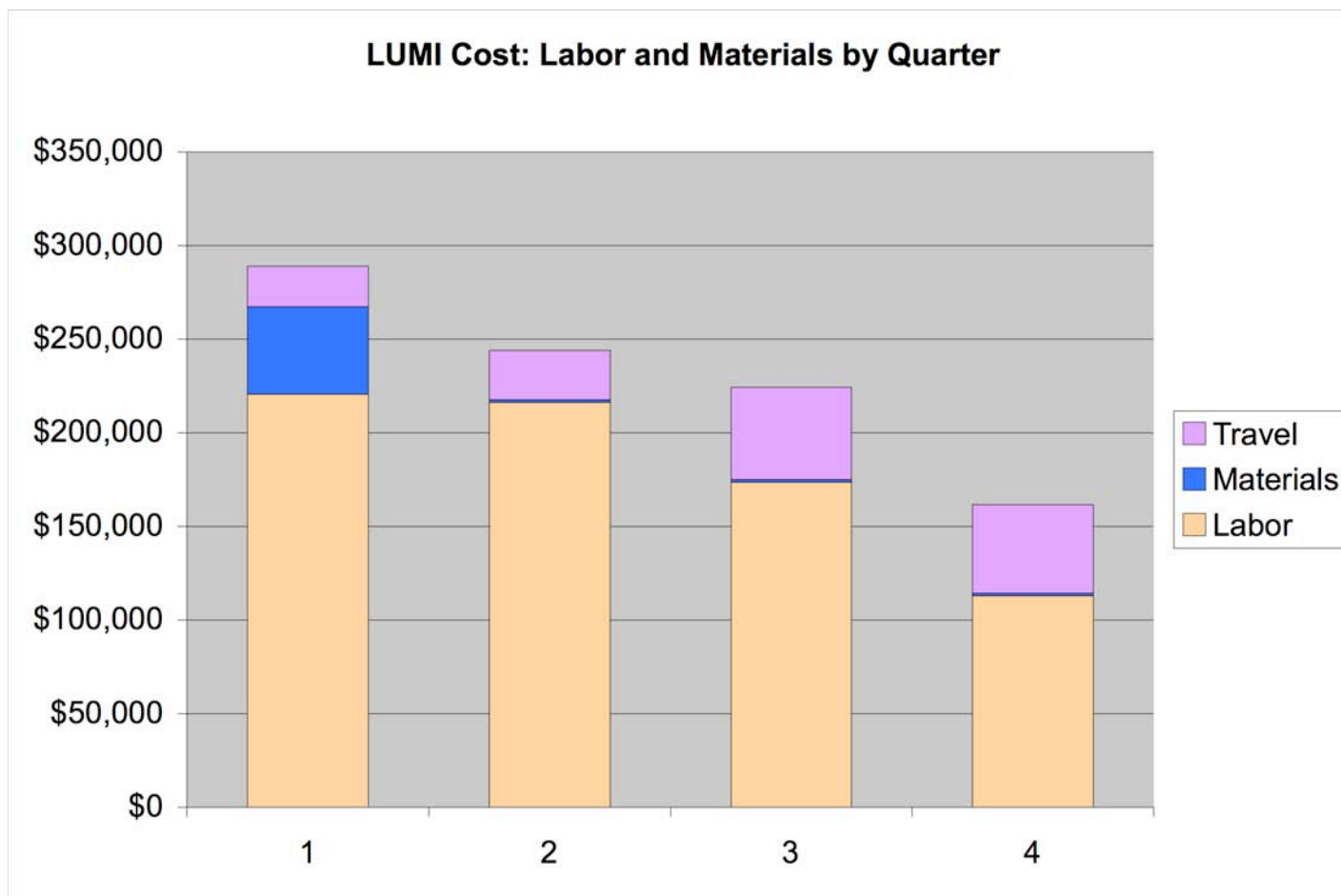
Phy	298
Phy-Off	127
PostDoc	622
EE6	241
EE6-off	166
EE5	430
EE3	723
EE2	700
Tech	689
Budget	202
Admin	202

# Cost by Quarter



Not including beam commissioning  
70% of budget spent in Q1 and Q2

# Cost by Quarter



Including beam commissioning



# Comments

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- It is essential that LARP carries out the systems commissioning with beam
  - The requirements on systems performance drastically change with LHC operating modes
  - Very unlikely that the LHC will reach full luminosity in FY09 (Sep. 2009)
- CERN involvement in 2009 will be essential to the smooth operation of the device in the future
  - Full hardware handover will be completed in 2009

# Conclusions

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- We have presented a detailed budget and schedule with contingency to the completion of the lumi construction project
- Contingency will be held at LARP
- We have the resources to execute this plan as described
- We depend upon LHC schedule to be able to complete